## REMARKS

The office action of July 7, 2008, has been carefully considered.

It is noted claims 1-4, 6-11, 13 and 14 are rejected under 35 U.S.C. 103(a) over JP 07-275920 to Fukaya et al.

In view of the Examiner's rejections of the claims, applicant has canceled claims 5 and 12 and amended claims 1 and 9.

It is respectfully submitted that the claims presently on file differ essentially and in an unobvious, highly advantageous manner from the constructions and methods disclosed in the reference.

The reference of Fukaya et al. has been discussed at length in a previously filed amendment and those comments are incorporated herein by reference. The following additional comments are provided.

The abstract of Kukaya et al. teaches "to reduce load on spent acid treatment by providing a vacuum treatment chamber in

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which <u>multi-divided electrodes and a conductor roll are provided</u> in the width direction confronting each other holding the pass line of a material to be treated between them." (Underlining added).

The construction of the reference has "... a draft mill 14, a bending roll 15, a grinder 16, a shot blast 17, dilute acid pickling devices 18-1, 18-2..." Under "Constitution" in the abstract Kukaya et al. state:

"The material to be treated is grounded by bringing it into contact with the conductor roll 22 in the vacuum treatment chamber 12, and a high voltage is applied to an electrode 21, and arc-discharge is performed between the material to be treated and the electrode 21, thereby, impurities and scale in the material to be treated are eliminated." (Underlining added).

In Kukaya et al. the conveying speed of the material to be descaled through the installation is 10 - 50 mpm.

The present invention includes inspecting the surface of the metal casting after the device for plasma descaling and/or plasma cleaning. Furthermore, in the present invention the speed with

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which the metal casting is guided through the device for plasma descaling and/or plasma cleaning is specified in the closed-loop control in dependence on the inspection, such that the desired quality of descaling and/or cleaning is attained.

In the presently claimed invention it is specifically recited that the speed of the metal casting through the device for plasma descaling and/or plasma cleaning is set in the closed-loop control so that the desired quality of descaling and/or cleaning is attained. This is not taught or suggested by the cited reference. Although Kukaya et al. teach that the material should pass through the installation at a speed which results in the necessary level of cleaning, this speed is merely selected empirically.

There is no teaching or suggestion by Kukaya et al. of using inspection results for specifying the speed of the material in a closed-loop control. More generally, there is no teaching by Kukaya et al. of controlling speed in a closed-loop, as in the presently claimed invention.

From the underlined passages of Kukaya et al. that were reproduced at the outset, one skilled in the art would find that

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control of voltage or current strength between the electrodes and the current to be applied to the material to be pickled is of primary relevance for the descaling or cleaning effectiveness.

There is no teaching of changing the speed in a closed-loop, which based on the teachings of the reference would have a negative impact on the production process. Based on the teachings of Kukaya et al. one skilled in the art would vary the voltage and/or the current to the electrodes, not the speed of the material.

In view of these considerations it is respectfully submitted that the rejection of claims 1-4, 6-11, 13 and 14 under 35 U.S.C. 103(a) over the above-discussed reference is overcome and should be withdrawn.

Reconsideration and allowance of the present application are respectfully requested.

Any additional fees or charges required at this time in connection with this application may be charged to Patent and Trademark Office Deposit Account No. 11-1835.

Respectfully submitted,

Βv

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## CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, PO Box 1450 Alexandria, VA 22313-1450, on November 7, 2008.

By: Klaus P Stof

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